CPS425SL/CP425HG
CP500SL/CP500HG
CP425G

User's Manual

K01-0000081-00

IMPORTANT SAFETY WARNINGS

(SAVE THESE INSTRUCTIONS)

This manual contains important safety instructions. Please read and follow all instructions carefully during installation and operation of the unit. Read this manual thoroughly before attempting to unpack, install, or operate your UPS.

CAUTION! To prevent the risk of fire or electric shock, install in a temperature and humidity controlled indoor area free of conductive contaminants. (Please see specifications for acceptable temperature and humidity range).

CAUTION! To reduce the risk of electric shock, do not remove the cover. There are no user serviceable parts inside.

CAUTION! Hazardous live parts inside can be energized by the battery even when the AC input power is disconnected.

CAUTION! The UPS must be connected to an AC power outlet with fuse or circuit breaker protection. Do not plug into an outlet that is not grounded. If you need to de-energize this equipment, turn off and unplug the unit.

CAUTION! To avoid electric shock, turn off the unit and unplug it from the AC power source before installing a computer component.

CAUTION! To reduce the risk of fire, connect only to a circuit provided with 20 amperes maximum branch circuit over current protection in accordance with the National Electric Code, ANSI/NFPA 70.

DO NOT USE FOR MEDICAL OR LIFE SUPPORT EQUIPMENT! CyberPower Systems does not sell products for life support or medical applications. **DO NOT** use in any circumstance that would affect operation and safety of life support equipment, any medical applications or patient care.

DO NOT USE WITH OR NEAR AQUARIUMS! To reduce the risk of fire or electric shock, do not use with or near an aquarium. Condensation from the aquarium can cause the unit to short out.

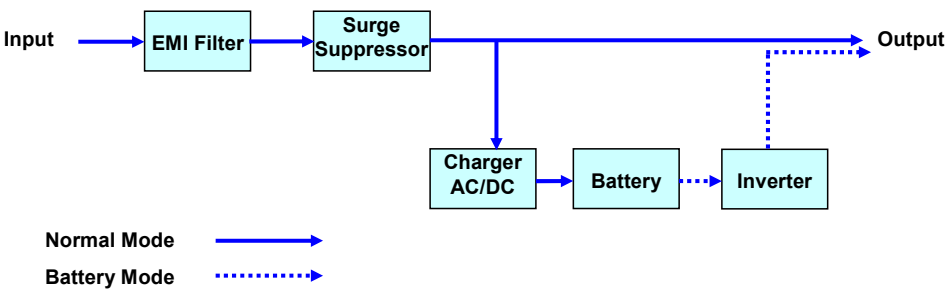
INSTALLING YOUR UPS SYSTEM

UNPACKING

Inspect the UPS upon receipt. The box should contain the following:

(a) UPS unit x 1 (b) User's manual x 1 (c) PowerPanel® Personal Edition software CD x 1 (for CPS425SL/CP425HG, CP500SL/CP500HG only) (d) USB device cable x 1 (for CPS425SL/CP425HG, CP500SL/CP500HG only) (e) Telephone cable x 1 (f) Warranty registration card x 1

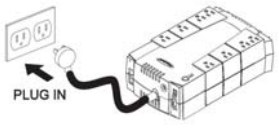
SYSTEM FUNCTION BLOCK DIAGRAM



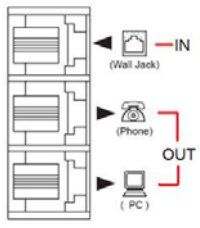
HOW TO DETERMINE THE POWER REQUIREMENTS OF YOUR EQUIPMENT

1. Ensure that the equipment plugged into the outlet does not exceed the UPS unit's rated capacity (425VA/255W for CPS425SL/CP425HG and CP425G, 500VA/300W for CP500SL/CP500HG). If the rated capacities of the unit are exceeded, an overload condition may occur and cause the UPS unit to shut down or the circuit breaker to trip.
2. There are many factors that can affect the amount of power that your computer system will require. For optimal system performance keep the load below 80% of the unit's rated capacity.

HARDWARE INSTALLATION GUIDE

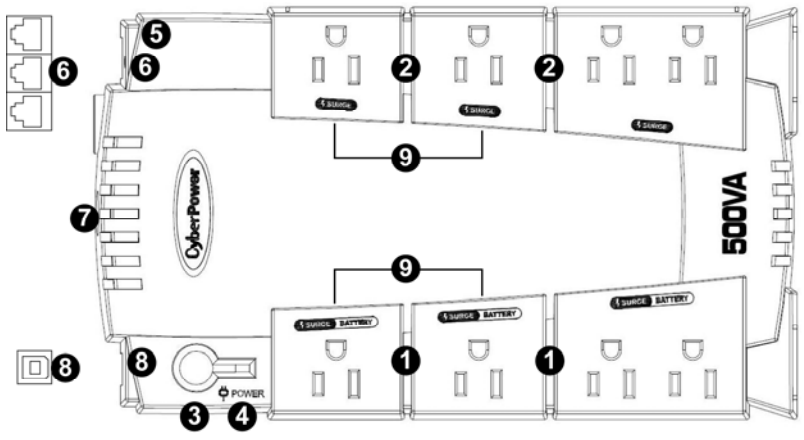


1. Your new UPS may be used immediately upon receipt. As a loss of charge may occur during shipping and storage, the unit should be plugged into a wall outlet to charge battery **for at least 8 hours**.
2. With the UPS unit turned off and unplugged, connect your computer, monitor, and any other peripherals requiring battery backup into the battery power supplied outlets. Plug the other peripheral equipment (printer, scanner, speakers) into the full-time surge protection outlets. **DO NOT plug a laser printer, paper shredder, copier, space heater, vacuum, sump pump or other large electrical device into the "Battery and Surge Protected Outlets". The power demands of these devices will overload and possibly damage the unit.**
3. To protect a fax, phone or modem, connect a telephone cable from the wall jack outlet to the IN jack of the UPS. Connect a telephone cable from one of the UPS OUT jacks to the modem port on the computer. The other UPS OUT jack can be used to protect a telephone or fax machine.
4. Plug the UPS into a 2 pole, 3 wire grounded receptacle (wall outlet). Make sure the wall branch outlet is protected by a fuse or circuit breaker and does not service equipment with large electrical demands (e.g. air conditioner, refrigerator, copier, etc…). The warranty prohibits the use of extension cords, outlet strips, and surge strips.
5. Press the power switch to turn the unit on. The Power On indicator light will illuminate green and the unit will "beep" twice.
6. If an overload is detected, an audible alarm will sound and the unit will emit one long beep. To correct this, turn the UPS off and unplug at least one piece of equipment from the battery power supplied outlets. Make sure the circuit breaker is depressed and then turn the UPS on.
7. To maintain optimal battery charge, leave the UPS plugged into an AC outlet at all times.
8. To store the UPS for an extended period, cover it and store with the battery fully charged. While in storage, recharge the battery every three months to ensure battery life.



BASIC OPERATION

DESCRIPTION



① **Battery and Surge Protected Outlets**
The unit has four battery powered/surge suppression outlets to ensure temporary uninterrupted operation of your equipment during a power failure. **(DO NOT plug a laser printer, paper shredder, copier, space heater, vacuum, sump pump or other large electrical device into the "Battery and Surge Protected Outlets." The power demands of these devices will overload and possibly damage the unit.)**

② **Full-Time Surge Protection Outlets**
The unit has four surge suppression outlets.

③ **Power Switch**
Press the power button to turn the UPS on or off.

④ **Power On Indicator (green)**
This LED is illuminated when the utility power is normal and the UPS outlets are providing power, free of surges and spikes.

⑤ **Electrical Wiring Fault Indicator (red)**
This LED indicator will illuminate to warn the user that a wiring problem exists, such as bad ground, missing ground or reversed wiring. If this is illuminated, disconnect all electrical equipment from the outlet and have an electrician verify the outlet is properly wired. The unit will not provide surge protection without being plugged into a grounded and properly wired wall outlet.

⑥ **Communication Protection Ports**
Communication protection ports will protect any standard modem, fax, or telephone line. (RJ11)

⑦ **Circuit Breaker**
Located on the side of the UPS, the circuit breaker serves to provide overload and fault protection.

⑧ **USB Port to PC (for CPS425SL/CP425HG and CP500SL/CP500HG; CP425G has no USB port)**
The ports allow connection and communication between the USB port on the computer and the UPS unit. The UPS communicates its status to the PowerPanel® Personal Edition software. The USB interface is also compatible with the Power Management applications provided by Windows Vista, Mac OS X, and Linux.
Note: To install PowerPanel® Personal Edition Software the computer will need Microsoft® Internet Explore 6.0 or higher installed.

⑨ **Outlets Designed for AC Adapters**
The UPS unit has four widely-spaced outlets, so AC power adapter blocks can be plugged into the UPS without overlapping adjacent outlets.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Full-time surge protection outlets stop providing power to equipment. Circuit breaker button is projecting from the side of the unit.	Circuit breaker has tripped due to an overload.	Turn the UPS off and unplug at least one piece of equipment. Wait 10 seconds, reset the circuit breaker by depressing the button, and then turn the UPS on.
The UPS does not perform expected runtime.	Battery not fully charged.	Recharge the battery by leaving the UPS plugged in.
	Battery is worn out.	Contact CyberPower Systems about replacement batteries at tech@cyberpowersystems.com
The UPS will not turn on.	The on/off switch is designed to prevent damage from rapidly turning it off and on.	Turn the UPS off. Wait 10 seconds and then turn the UPS on.
	The unit is not connected to an AC outlet.	The unit must be connected to a 110/120V 60Hz outlet.
	The battery is worn out.	Contact CyberPower Systems about replacement batteries at tech@cyberpowersystems.com
	Mechanical problem.	Contact CyberPower Systems at tech@cyberpowersystems.com
PowerPanel® Personal Edition is inactive (all icons are gray). * CP425G has no USB port.	The USB cable is not connected.	Connect the USB cable to the UPS unit and an open USB port on the back of the computer. You must use the cable that came with the unit.
	The USB cable is connected to the wrong port.	Check the back of the computer for an additional USB port. Move the cable to this port.
	The unit is not providing battery power.	Shutdown your computer and turn the UPS off. Wait 10 seconds and turn the UPS back on. This should reset the unit.

Additional troubleshooting information can be found at "Support" at www.CPSww.com

EXPECTED RUNTIME IN MINUTES

(Due to the differences in computer components, the runtime will vary.)

Model	Mac mini with 15" LCD	Desktop PC with 17" LCD Monitor	Desktop PC with 19" LCD Monitor	Desktop PC with 21" LCD Monitor	Desktop PC with 17" CRT Monitor
CPS425SL/CP425HG CP425G	18	10	8	7	5
CP500SL/CP500HG	30	17	12	10	7

TECHNICAL SPECIFICATIONS

Model	CPS425SL/CP425HG CP425G	CP500SL/CP500HG
Capacity	425VA/255W	500VA/300W
Input Voltage on Utility	96V to 140V	
Input Frequency	47 Hz to 63 Hz	
On-Battery Output Voltage	120Vac ± 7%	
On-Battery Output Frequency	50Hz/60Hz (UPS boots in battery mode: 60Hz)	
Transfer Time	4ms Typical	
Max. Load for UPS Outlets (4 Outlets)	425VA/255W	500VA/300W
Max. Load for Full-Time Surge Protection outlets (8 Outlets)	8 Amps	12 Amps
On-Battery Output Wave Form	Simulated Sine Wave	
Operating Temperature	+ 32°F to 104° F / 0° C to 40° C	
Operating Relative Humidity	0 to 90% non-condensing	
Size (L x W x H)	9.8" x 5.8" x 3.1" 250 x 147 x 80 mm	
Net Weight	5.0lbs / 2.3kg	6.24lbs / 2.83kg
Battery Type	12V, 3Ah	12V, 4.5Ah
Typical Battery Recharge Time	8 hours typical from total discharge	
Typical Battery Life	3 to 6 years, depending on number of discharge/recharge cycles	
Recommended Battery	Sealed Maintenance Free Lead Acid Battery	
Safety Approvals	UL1778(UPS), cUL CSA C22.2 No.107.3-05, FCC/DoC Class B	

DEFINITIONS FOR ILLUMINATED LED INDICATORS

Power ON	Wiring Fault	Alarm	CONDITION
On	**Off**	**Off**	**Normal**
On	**Off**	**Beep twice every 30 seconds**	**Utility Failure-** The UPS is providing power to battery power-supplied outlets from its battery.
On	**Off**	**Rapid Beeping every 1/2 second**	**Utility Failure-** The UPS is providing battery power. Rapid beeping indicates the unit will run out of power shortly.
Off	**Off**	**Constant tone**	**Battery Overload -** Occurs when connected equipment exceeds the listed capacity of the UPS. Turn the UPS off, unplug at least one piece of equipment from battery outlets, wait 10 seconds, reset the circuit breaker and turn the unit on.
On/Off	**On**	**None**	**Electrical Wiring Fault -** This **indicates a wiring problem with the AC outlet** such as bad ground, missing ground, or reversed wiring. Disconnect all electrical equipment from the outlet and have an electrician check the outlet to insure proper wiring.

CYBERPOWER GREENPOWER UPS™ TECHNOLOGY

High Frequency Energy-Saving Design

The GreenPower UPS™ has a high-frequency, low copper design that includes a compact energy-efficient inverter and charger. This ultra-efficient GreenPower UPS™ technology significantly reduces your energy costs as it protects your equipment from data loss and damage. The GreenPower UPS™ is also manufactured in compliance with the Restriction on Hazardous Substances (RoHS) directive making it one of the most environmentally-friendly on the market today.

ENERGY-SAVING TECHNOLOGY

Limited Warranty and Connected Equipment Guarantee

Read the following terms and conditions carefully before using the CyberPower CPS425SL/CP425HG, CP500SL/CP500HG, and CP425G (the "Product"). By using the Product you consent to be bound by and become a party to the terms and conditions of this Limited Warranty and Connected Equipment Guarantee (together referred to as this "Warranty"). If you do not agree to the terms and conditions of this Warranty, you should return the Product for a full refund prior to using it.

Who is Providing this Warranty?
CyberPower Systems (USA), Inc. ("CyberPower") provides this Limited Warranty.

What Does This Warranty Cover?
This warranty covers defects in materials and workmanship in the Product under normal use and conditions. It also covers equipment that was connected to the Product and damaged because of the failure of the Product.

What is the Period of Coverage?
This warranty covers the Product for three years and connected equipment for as long as you own the Product.

Who Is Covered?
This warranty only covers the original purchaser. Coverage ends if you sell or otherwise transfer the Product.

How Do You Get Service?
1. Call us at (877) 297-6937 or write to us at Cyber Power Systems (USA), Inc., 4241 12th Ave. E., STE 400, Shakopee, MN 55379 or send us an e-mail message at claims@cyberpowersystems.com for instructions.
2. When you contact CyberPower, identify the Product, the Purchase Date, and the item(s) of Connected Equipment. Have information on all applicable insurance or other resources of recovery/payment that are available to the Initial Customer and Request a Claim Number.
3. You must provide a dated Proof-of-Purchase receipt (or other proof of the original purchase) and provide a description of the defect.
4. Pack and ship the product to CyberPower and, if requested, the item(s) of Connected Equipment, a repair cost estimate for the damage to the Connected Equipment, and all claim forms that CyberPower provides to you. Show the Claim Number on the shipping label or include it with the product. **You must prepay all shipping costs, you are responsible for packaging and shipment, and you must pay the cost of the repair estimate.**

How Long Do I Have To Make A Claim?
All claims must be made within ten days of the occurrence.

What Will We Do To Correct Problems?
CyberPower will inspect and examine the Product.

If the Product is defective in material or workmanship, CyberPower will repair or replace it at CyberPower's expense, or, if CyberPower is unable to or decides not to repair or replace the Product (if defective) within a reasonable time, CyberPower will refund to you the full purchase price you paid for the Product (purchase receipt showing price paid is required).

If it appears that our Product failed to protect any equipment plugged into it, we will also send you forms for making your claim for the connected equipment. We will repair or replace the equipment that was damaged because of the failure of our Product or pay you the fair market value (NOT REPLACEMENT COST) of the equipment at of the time of the damage. We will use Orion Blue Book, or another a third-party valuation guide, or eBay, craigslist, or other source to establish that amount. Our maximum liability is limited to $75,000 for the CPS425SL/CP425HG and CP425G, and $100,000 for the CP500SL/CP500HG.

Who Pays For Shipping?
We pay when we send items to you; you pay when you send items to us.

What Are Some Things This Warranty Does Not Cover?
1. This Warranty does not cover any software that was damaged or needs to be replaced due to the failure of the Product or any data that is lost as a result of the failure or the restoration of data or records, or the reinstallation of software.
2. This Warranty does not cover or apply to: misuse, modification, operation or storage outside environmental limits of the Product or the equipment connected to it, nor for damage while in transit or in storage, nor if there has been improper operation or maintenance, or use with items not designed or intended for use with the Product, such as laser printers, appliances, aquariums, medical or life support devices, etc.

What Other Limitations Apply?
1. This Warranty does not apply unless the Product and the equipment that was connected to it were connected to properly wired and grounded outlets (including compliance with electrical and safety codes of the most current electrical code), without the use of any adapters or other connectors.
2. The Product must have been plugged directly into the power source and the equipment connected to the Product must be directly connected to the Product and not "daisy-chained" together in serial fashion with any extension cords, another Product or device similar to the Product, surge suppressor, or power tap. Any such installation voids the Limited Warranty.
3. The Product and equipment connected to it must have been used properly in a suitable and proper environment and in conformance with any license, instruction manual, or warnings provided with the Product and the equipment connected to it.
4. The Product must have been used at all times within the limitations on the Product's VA capacity.

What are the Limitations?
The sole and exclusive remedies of the Initial Customer are those provided by this Warranty.

The Product was designed to eliminate disrupting and damaging effects of momentary (less than 1ms) voltage spikes or impulses from lightning or other power transients. If it can be shown that a voltage spike lasting longer than 1ms has occurred, the occurrence will be deemed outside the rated capabilities of the Product and the Limited Warranty is void. CyberPower Does Not Cover or Undertake Any Liability in Any Event for Any of the Following:

1. Loss of or damage to data, records, or software or the restoration of data or records, or the reinstallation of software.
2. Damage from causes other than AC Power Line Transients, spikes, or surges on properly installed, grounded and code-compliant 120 volt power lines in the United States and Canada; transients, surges or spikes on standard telephone land lines, PBX telephone equipment lines or Base 10T Ethernet lines, when properly installed and connected. (This exclusion applies, for example, to fluctuations in data transmission or reception, by CATV or RF transmission or fluctuations, or by transients in such transmission.)
3. Damage from any circumstance described as excluded above with respect to the Product.
4. Damages from fire, flood, wind, rain, rising water, leakage or breakage of plumbing, abuse, misuse or alteration of either the product or the Connected Equipment.
5. CyberPower excludes any liability for personal injury under the Limited Warranty and Connected Equipment Guarantee. CyberPower excludes any liability for direct, indirect, special, incidental or consequential damages, whether for damage to or loss of property [EXCEPT FOR (AND ONLY FOR) the specific limited agreement of CyberPower to provide certain warranty benefits regarding "Connected Equipment" under this Warranty], loss of profits, business interruption, or loss of information or data. NOTE: Some States or Provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.
6. The Product is not for use in high-risk activities or with aquariums. The Product is not designed or intended for use in hazardous environments requiring fail-safe performance, or for use in any circumstance in which the failure of the Product could lead directly to death, personal injury, or severe physical or property damage, or that would affect operation or safety of any medical or life support device (collectively, "High Risk Activities"). CyberPower expressly disclaims any express or implied warranty of fitness for High Risk Activities or with aquariums. CyberPower does not authorize use of any Product in any High Risk Activities or with Aquariums. **ANY SUCH USE IS IMPROPER AND IS A MISUSE OF THE PRODUCT**.

What is the Fine Print?

The application of the United Nations Convention of Contracts for the International Sale of Goods is expressly excluded.

For further information please feel free to contact CyberPower at Cyber Power Systems (USA), Inc. 4241 12th Ave E., STE 400, Shakopee, MN 55379; call us at (877) 297-6937; or send us an e-mail message at claims@cyberpowersystems.com.

CP550SL / AE550
User's Manual

K01-AE55000

IMPORTANT SAFETY WARNINGS

(SAVE THESE INSTRUCTIONS)

This manual contains important safety instructions. Please read and follow all instructions carefully during installation and operation of the unit. Read this manual thoroughly before attempting to unpack, install, or operate your UPS.

CAUTION! To prevent the risk of fire or electric shock, install in a temperature and humidity controlled indoor area free of conductive contaminants. (Please see specifications for acceptable temperature and humidity range).

CAUTION! To reduce the risk of electric shock, do not remove the cover except to service the battery. No user serviceable parts inside except for battery.

CAUTION! Hazardous live parts inside can be energized by the battery even when the AC input power is disconnected.

CAUTION! UPS must be connected to an AC power outlet with fuse or circuit breaker protection. Do not plug into an outlet that is not grounded. If you need to de-energize this equipment, turn off and unplug the unit.

CAUTION! To avoid electrical shock, turn off the unit and unplug it from the AC power source before servicing the battery or installing a computer component.

DO NOT USE FOR MEDICAL OR LIFE SUPPORT EQUIPMENT! CyberPower Systems does not sell products for life support or medical applications. **DO NOT** use in any circumstance that would affect operation or safety of any life support equipment or with any medical applications or patient care.

DO NOT USE WITH OR NEAR AQUARIUMS! To reduce the risk of fire or electric shock, do not use with or near an aquarium. Condensation from the aquarium can cause the unit to short out.

DO NOT USE WITH LASER PRINTERS! The power demands of these devices will overload and possibly damage the unit.

INSTALLING YOUR UPS SYSTEM

UNPACKING

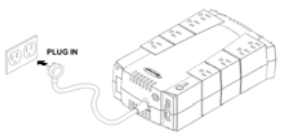
Inspect the UPS upon receipt. The box should contain the following:
(1) UPS unit; (1) User's manual; (1) PowerPanel™ Personal Edition software CD; (1) USB device cable; (1) Telephone cable; (1) Warranty registration card

HOW TO DETERMINE THE POWER REQUIREMENTS OF YOUR EQUIPMENT

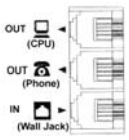
1. Make sure that the total Volt-Amp (VA) requirements of your computer, monitor and peripheral equipment does not exceed 1440VA.
2. Ensure that the equipment plugged into the four battery power-supplied outlets does not exceed the UPS unit's rated capacity (550VA/330W for CP550SL / AE550). If rated unit capacities are exceeded, an overload condition may occur and cause the UPS unit to shut down or the circuit breaker to trip.
3. If the power requirements of your equipment are listed in units other than Volt-Amps (VA), convert Watts (W) or Amps (A) into VA by doing the calculations below. Note: The below equation only calculates the maximum amount of VA that the equipment can use, not what is typically used by the equipment at any one time. Users should expect actual usage values to be approximately 60% of the calculated values. To estimate power requirements:
   _____ Watts (W) x 1.67 = _____ VA or _____ Amps (A) x 120 = _____ VA
   Add the totals up for all pieces of equipment and multiply this total by .6 to calculate actual power requirements.
   There are many factors that can affect the amount of power that your computer system will require. The total load that you will be placing on the battery-powered outlets should not exceed 80% of the unit's capacity.

HARDWARE INSTALLATION GUIDE

1. Your new UPS may be used immediately upon receipt. However, **recharging the battery for at least 16 hours** is recommended to insure that the battery's maximum charge capacity is achieved. A loss of charge may occur during shipping and storage. To recharge the battery, simply leave the unit plugged into an AC outlet. The unit will charge in both the ON as well as the OFF position. If you wish to use the software, use the enclosed USB device cable to connect the UPS to your computer. If you are not going to use the software, you do not need to connect the cable.



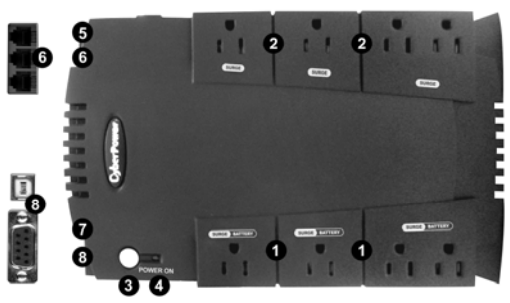
2. With the UPS unit turned off and unplugged, connect your computer, monitor and any externally powered data storage device (Zip drive, Jazz drive, Tape drive, etc…) into the battery power supplied outlets. Plug your peripheral equipment (printer, scanner, speakers) into the full-time surge protection outlets. **DO NOT plug a laser printer, paper shredder, copier, space heater, vacuum or other large electrical device into the UPS. The power demands of these devices will overload and possibly damage the unit.**
3. To protect a fax, phone or modem, connect a telephone cable from the wall jack outlet to the in jack of the UPS. Connect a telephone cable from the out jack with the CPU icon to the modem port on your computer. The out jack with the telephone icon can be used to protect a telephone or fax machine.



4. Plug the UPS into a 2 pole, 3 wire grounding receptacle (wall outlet). Make sure the wall branch outlet is protected by a fuse or circuit breaker and does not service equipment with large electrical demands (e.g. refrigerator, copier, etc…). The warranty prohibits the use of extension cords, outlet strips, and surge strips.
5. Press the power switch to turn the unit on. The power on indicator light will illuminate and the unit will "beep" once.
6. If an overload is detected, an audible alarm will sound and the unit will emit one long beep. To correct this, turn the UPS off and unplug at least one piece of equipment from the battery power supplied outlets. Wait 10 seconds. Make sure the circuit breaker is depressed and then turn the UPS on.
7. Your UPS is equipped with an auto-charge feature. When the UPS is plugged into an AC outlet, the battery will automatically recharge.
8. To maintain optimal battery charge, leave the UPS plugged into an AC outlet at all times.
9. To store your UPS for an extended period, cover it and store with the battery fully charged. While in storage recharge the battery every three months to insure battery life.

BASIC OPERATION

DESCRIPTION



Battery and Surge Protected Outlets
The unit has four battery powered/surge protected outlets for connected equipment and ensures temporary uninterrupted operation of your equipment during a power failure.

Full-Time Surge Protection Outlets
The unit has four always on surge suppression outlets.

Power Switch
Can be used as a master on/off switch for equipment connected to the battery power supplied outlets.

Power On Indicator
This LED is illuminated when the utility condition is normal and the UPS outlets are providing power, free of surges and spikes.

Electrical Wiring Fault Indicator
This LED indicator will illuminate to warn the user that a wiring problem exists, such as bad ground, missing ground or reversed wiring. If this is illuminated, user is advised to disconnect all electrical equipment from the outlet and have an electrician check to ensure the outlet is properly wired. The unit will not provide surge protection without being plugged into a grounded and properly wired wall outlet.

Communication Protection Ports
Communication protection ports will protect any standard modem, fax or telephone line.

Circuit Breaker
Located on the side of the UPS, the circuit breaker serves to provide overload and fault protection.

Serial/USB Ports to PC
The ports allow connection and communication from the USB or DB-9 serial port on the computer to the UPS unit. The UPS communicates its status to the PowerPanel™ Personal Edition software. This interface is also compatible with the Power Management UPS control provided by Windows© 2000 and Windows© XP.

Note: Only one of these two ports can be used to communicate with your computer at one time.

Note: To install PowerPanel™ Personal Edition Software the computer will need Microsoft© Internet Explore 5.0 or higher installed.

Note: If using the Serial Port, users need to download Power Panel© software from our website http://www.cyberpowersystems.com and order the standard serial cable. If you have any questions email CyberPower technical support for help. tech@cyberpowersystems.com

Outlets Designed for AC Adapters
The unit has four outlets spaced to allow AC power adapter blocks to be plugged into the UPS without blocking adjacent outlets.

Vertical Use
The unit can be placed on it's end in a vertical orientation.

Note: We recommend you place the unit next to the wall when standing the unit vertically.

REPLACING THE BATTERY

CAUTION! Read and follow the IMPORTANT SAFETY INSTRUCTIONS before servicing the battery. Service the battery under the supervision of personnel knowledgeable of batteries and their precautions.

CAUTION! Use only the specified type of battery. See your dealer for replacement batteries.

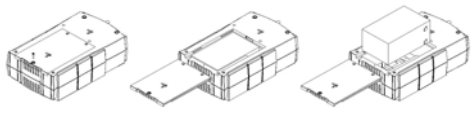
CAUTION! The battery may present a risk of electrical shock. Do not dispose of battery in a fire as it may explode. Follow all local ordinances regarding proper disposal of batteries. Almost any retailer that sells lead-acid batteries collects used batteries for recycling, as required by most state laws.

CAUTION! Do not open or mutilate the batteries. Released electrolyte is harmful to skin and eyes and may be toxic.

CAUTION! A battery can present a high risk of short circuit current and electrical shock. Take the following precautions before replacing the battery:

1. Remove all watches, rings or other metal objects.
2. Only use tools with insulated handles.
3. Do not lay tools or metal parts on top of battery or any terminals.
4. Wear rubber gloves and boots.
5. Determine if the battery is inadvertently grounded. If grounded, remove the source of ground. **CONTACT WITH GROUNDED BATTERY CAN RESULT IN ELECTRICAL SHOCK!**

TO REPLACE THE BATTERY



1. Turn off and unplug all connected equipment.
2. Turn the UPS off and unplug it from the AC power source.
3. Turn the UPS upside down.
4. Remove the 1 retaining screw.
5. Slide the battery compartment cover completely off of the unit.
6. Remove the battery from the compartment.
7. Disconnect the battery wires from the battery.
8. Install the replacement battery by connecting the red wire and black wire to the positive (+) and negative (-) terminal of the battery.
9. Put the battery back into the compartment.
10. Slide back the battery compartment cover and tighten the retaining screw.
11. Recharge the unit for 4 – 8 hours to fully charge the battery.

REMINDER: Batteries are consider **HAZARDOUS WASTE** and must be disposed of properly. Almost any retailer that sells lead-acid batteries collects used batteries for recycling, as required by most state laws.

TROUBLE SHOOTING

Problem	Possible Cause	Solution
Full-time surge protection outlets stop providing power to equipment. Circuit breaker button is projecting from the side of the unit.	Circuit breaker has tripped due to an overload.	Turn the UPS off and unplug at least one piece of equipment. Wait 10 seconds, reset the circuit breaker by depressing the button, and then turn the UPS on.
The UPS does not perform expected runtime.	Battery not fully charged.	Recharge the battery by leaving the UPS plugged in.
	Battery is slightly worn out.	Contact CyberPower Systems about replacement batteries at tech@cyberpowersystems.com
The UPS will not turn on.	The on/off switch is designed to prevent damage by rapidly turning it off and on.	Turn the UPS off. Wait 10 seconds and then turn the UPS on.
	The unit is not connected to an AC outlet.	The unit must be connected to a 110/120v 60Hz outlet.
	The battery is worn out.	Contact CyberPower Systems about replacement batteries at tech@cyberpowersystems.com
	Mechanical problem.	Contact CyberPower Systems at tech@cyberpowersystems.com
PowerPanel™ Personal Edition is inactive (all icons are gray).	The USB / serial cable is not connected.	Connect the USB / serial cable to the UPS unit and an open USB / serial port on the back of the computer. You must use the cable that came with the unit.
	The USB / serial cable is connected to the wrong port.	Check the back of the computer for an additional USB / serial port. Move the cable to this port.
	The unit is not providing battery power.	Shutdown your computer and turn the UPS off. Wait 10 seconds and turn the UPS back on. This should reset the unit.
	The serial cable is not the cable that was included with the UPS unit.	If you are using a serial cable you must use a CyberPower serial cable. If you need this cable please contact technical support. tech@cyberpowersystems.com

Additional troubleshooting information can be found at
www.cyberpowersystems.com/support.htm

TECHNICAL SPECIFICATIONS

Model	CP550SL / AE550
Capacity	550VA / 330W
Input Voltage on Utility	100V to 140V
Input Frequency	57 Hz to 63 Hz
On-Battery Output Voltage	120Vac ± 5%
Transfer Time	4ms Typical
Max. Load for UPS Outlets (4 Outlets)	550VA / 330W
Max. Load for Full-Time Surge Protection outlets (8 Outlets)	12 Amps
On-Battery Output Wave Form	Simulated Sine Wave Form
Operating Temperature	+ 32°F to 95° F / 0° C to 35° C
Operating Relative Humidity	0 to 95% NON-CONDENSING
Size (L x W x H)	10 2/3" x 6 1/2" x 3 1/2" / 27.1cm x 16.5cm x 8.7cm
Net Weight	12.5 lbs
Typical Battery Recharge Time	8 hours typical from total discharge
Typical Battery Life	3 to 6 years, depending on number of discharge/recharge cycles
Battery Type	12V / 8.0AH

Recommended Battery	Spill-proof, Maintenance-free, sealed lead-acid
Safety Approvals	UL1778(UPS), cUL107., FCC/DoC Class B

EXPECTED RUNTIME IN MINUTES

(Due to differences in computer components, the runtime will vary.)

Model	iMac G4	Desktop PC with LCD Monitor	Desktop PC with 15" Monitor	Desktop PC with 17" Monitor	Desktop PC with 21" Monitor
CP550SL AE550	60 minutes	43 minutes	24 minutes	20 minutes	15 minutes

DEFINITIONS FOR ILLUMINATED LED INDICATORS

Power ON	Wiring Fault	Alarm	CONDITION
On	Off	Off	Normal
On	On/Off	Two Beeps	**Utility Failure-** The UPS is providing power to battery power-supplied outlets from its battery.
On	On/Off	Rapid Beeps	**Utility Failure-** The UPS is providing battery power. Rapid beeps indicate the unit will run out of power shortly.
Off	On/Off	Long Beep	**Battery Overload-** Occurs when connected equipment exceeds the rating of battery outlets of the unit. Turn the UPS off, unplug at least one piece of equipment from battery outlets, wait 10 seconds, reset the circuit breaker and turn the unit on.
On/Off	On	None	**Electrical Wiring Fault-** This **indicates a wiring problem with the AC outlet** such as bad ground, missing ground or reversed wiring. User is advised to disconnect all electrical equipment from the outlet and have an electrician check the outlet to insure proper wiring.

Limited Warranty and Connected Equipment Guarantee

In purchasing a CP550SL / AE550 in the United States or Canada, the original end user receives a Limited Warranty and Connected Equipment Guarantee from Cyber Power Systems (USA), Inc. (for ease of reading, referred to as "CyberPower"). The Limited Warranty and the Connected Equipment Guarantee are intended to be the original end-user's exclusive rights and remedies. The Limited Warranty and the Connected Equipment are separate, all though they are related.

Limited Warranty. The original end user (referred to as the "Initial Customer") receives an express limited warranty (referred to as the "Limited Warranty") for the CP550SL / AE550 purchased from CyberPower (referred to as the "Product"). The Limited Warranty is for the Product itself. The terms of the Limited Warranty are explained below.

Connected Equipment Guarantee. CyberPower also provides the Initial Customer with protection in the event that the Product is not free from defects in materials and workmanship, and certain equipment connected to the Product is damaged (the "Connected Equipment Guarantee"). The Connected Equipment Guarantee protects the Initial Customer for damage to equipment plugged into the Product. The terms of the Connected Equipment Guarantee are explained below.

The Limited Warranty and the Connected Equipment Guarantee are subject to the terms set forth below. Additionally, State or Provincial law may adjust the terms of the Limited Warranty or the Connected Equipment Guarantee or the State or Province may impose additional obligations, or additional "implied warranties." To the extent necessary to comply with those laws, the terms of the Limited Warranty and the Connected Equipment Guarantee should be read to adjust to those requirements only to the extent necessary to comply with such local law.

If you are an Initial Customer, you are asked to read the following terms and conditions carefully before using the Product. By using the Product you consent to be bound by and become a party to the Limited Warranty and Connected Equipment Guarantee. If you do not agree to the terms and conditions of the Limited Warranty and Connected Equipment Guarantee, you should return the Product for a full refund prior to using it.

REGISTRATION

CyberPower requests that you complete and return the Warranty Registration Card enclosed with the Product or register the Product at its website (www.cyberpowersystems.com) to establish that you are the Initial Customer of the Product, and therefore entitled coverage under the Limited Warranty and the Connected Equipment Guarantee. (Registration is not required for Limited Warranty coverage, but note, if you do not complete a registration card you will be required to provide proof of purchase, as described below, to have the benefits of this Limited Warranty.)

LIMITED WARRANTY

CyberPower warrants to you, the Initial Purchaser, that the Product will be free from defects in material and workmanship for three years from the date of original purchase, subject to the terms of this Limited Warranty.

Any Implied Warranty of Merchantability or for Fitness for a Particular Purpose, if applicable to the Product, is limited in duration to the period of ownership by the Initial Customer. This provision shall NOT create any Implied Warranty or Merchantability or of Fitness for a Particular Purpose that would not otherwise apply to the Product. NOTE: **Some States do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you**.

To be covered you must still be the owner of the Product at the time of the failure that results in the claim made under this Limited Warranty.

Exclusive Remedies Under Limited Warranty.

Your exclusive remedy and CyberPower's' sole obligations are as follows for the Product:

If (a) the CyberPower Product you purchased and still own is defective in material or workmanship under this Limited Warranty or any applicable warranty imposed by law, and

(b) all Limited Warranty requirements have been met, CyberPower will repair or replace the

Product if it proves to be defective in material or workmanship during the Warranty Period.

Making a Limited Warranty Claim.

To make a Limited Warranty claim on a Product, you must do the following:

1. Complete and return the CyberPower Warranty Registration Card, or provide reasonable proof of purchase (for example, a sales receipt) that establishes you as the Initial Customer (the original end-user consumer purchaser) of the Product and prove that the Product was purchased within three (3) years of the event for which you want to make a claim for warranty service.
2. Call CyberPower at (952) 403-9500 or (877) 297-6937 (toll free), write to CyberPower at 5555 12th Ave. East, Suite 110, Shakopee, MN 55379, or e-mail CyberPower at claims@cyberpowersystems.com, within ten (10) days of the event for which you want to make a claim.
3. When you contact CyberPower, identify the Product, the Purchase Date, and request Return Materials Authorization (RMA) information from CyberPower.
4. Pack and ship the Product to CyberPower as instructed in your RMA. Show the RMA code on the shipping label or include it with the Product. **You MUST prepay all shipping costs and you are responsible for packaging and shipment.**

CyberPower will inspect and examine the Product within ten (10) days of receipt. If the Product is not as warranted, CyberPower will repair or replace the Product and return it to you at CyberPower's expense, or, if CyberPower is unable to or decides not to repair or replace the Product (if defective) within a reasonable time, CyberPower will refund to you the full purchase price you paid for the Product (purchase receipt showing price paid is required).

CONNECTED EQUIPMENT GUARANTEE

If you are the Initial Purchaser and the Product is still covered by the Limited Warranty, the Connected Equipment Guarantee provides protection for damage to equipment connected to the Product ("Connected Equipment"), subject to certain terms and limitations.

The Connected Equipment Guarantee is not "first dollar" coverage. It is secondary. If you have any other source of payment for your loss, such as insurance, another warranty, or an extended warranty or purchase protection plan ("Primary Coverage"), CyberPower' will pay only to the extent that that the Primary Coverage does not cover the loss. CyberPower's obligation is reduced by any amounts that you are entitled to recover from the Primary Coverage, whether or not you make a claim for recovery under any applicable Primary Coverage.

The Limited Warranty does not cover Connected Equipment, but as is explained below, to be covered under the Connected Equipment Guarantee, the Connected Equipment must have been damaged due to a failure of the Product. The Connected Equipment must have been damaged due to a defect in materials or workmanship of the Product.

In the event of damage to the Connected Equipment, your exclusive remedies, and CyberPower's sole obligations, are as follows for Connected Equipment. If (a) the Product purchased and owned by you is defective in material or workmanship; (b) the Limited Warranty requirements have been met (except that the three year limitation of the Limited Warranty does not limit the Connected Equipment Guarantee, which is for the lifetime of the Product), and; (c) none of the limitations or exclusions on warranty coverage apply (or than the three year limit), CyberPower will (as CyberPower elects, as permitted by law), repair, replace, or pay the Agreed Damage Amount (defined below) for, the item(s) of your electronic equipment directly and properly connected to the product (the "Connected Equipment") if that Connected Equipment is (x) damaged by AC power line transients, spikes, or surges on properly installed, grounded, and code-compliant 120 volt power lines in the United States and Canada, or by transients, surges or spikes on standard telephone equipment lines, or Base 10/100T Ethernet lines that are properly installed and connected (a "Power Disturbance") and (y) is directly plugged into and properly connected to a CyberPower Product in its original condition which is properly operated when a Power Disturbance passes through the CyberPower Product and (y.1) exhausts the protection capacity of the CyberPower Product or (y.2) damages the CyberPower Product. This provision sets out the only liability of any character of CyberPower for direct, indirect, special, consequential, and/or incidental damages under our Limited Warranty, applies only to Connected Equipment, and all such Liability is limited to the Agreed Damage Amount.

Making a Connected Equipment Guarantee Claim.

To make a Warranty claim for damage to Connected Equipment under the Connected Equipment Guarantee, you must do the following:

1. Complete and return the CyberPower Warranty card or provide reasonable proof of purchase, for example, a sales receipt that establishes you as the original end-user consumer purchaser of the Product.
2. Call CyberPower at (952) 403-9500 or (877) 297-6937 (toll free), write to CyberPower at 5555 12th Ave East, Suite 110, Shakopee, MN 55379, or e-mail CyberPower at claims@cyberpowersystems.com within ten (10) days of the date of the event for which you wish to make a claim for warranty service.
3. When you contact CyberPower, identify the Product, the Purchase Date, and the item(s) of Connected Equipment. Have information on all applicable insurance or other resources of recovery/payment that are available to the Initial Customer and the name of the power utility supplier for the location of the Connected Equipment and Request a Claim Number.
4. Pack and ship the product to CyberPower and, if requested, the item(s) of Connected Equipment, a repair cost estimate for the damage to the Connected Equipment, and all claim forms that CyberPower provides to you. Show the Claim Number on the shipping label or include it with the product. **Initial Customer shall prepay all shipping costs, must pay the cost of the repair estimate, and is responsible for packaging and shipment.**

CyberPower's Duties.

CyberPower will inspect and examine the Product and the item(s) of Connected Equipment (or at CyberPower's election, your written statement and repair cost estimate for those item(s)). You must return the product for inspection.

If the damage to Connected Equipment is covered by the Connected Equipment Guarantee, CyberPower will (in addition to Limited Warranty remedies for the CyberPower Product itself) repair (or pay the costs of repair) or replace the Connected Equipment or, at the option of CyberPower, as permitted by law, pay to the Initial Customer the "Agreed Damage Amount" (up to the aggregate limits stated below) for all item(s) of Initial Customer's Connected Equipment. The "Agreed Damage Amount" for all items of Initial Customer's Connected Equipment shall be the lesser of the amount determined under Clause (1) or (2) below, reduced by any amounts described in Clause (3) below:

1. The fair market value of the Connected Equipment as established by the lower of (a) the price list of Orion Blue Book on the date of occurrence (or if such price list is no longer published, a published or announced price list reasonably selected by CyberPower), or (b) the average price the same or similar items are being sold for on

E-bay, or (c) the lowest price the same or similar items can be purchased for in the United States; or

2. The aggregate ceiling amount for all Connected Equipment: CyberPower CP550SL / AE550 - $75,000.00.
3. The amount(s) of all payment you have or are entitled to receive from insurance, other warranties, extended warranties, or from other sources or persons for the Connected Equipment or damage to such equipment so that CyberPower's maximum liability shall be reduced to reflect all such other payments or sources of recovery

If CyberPower replaces the connected equipment or pays to the Initial Customer the Agreed Damage Amount, the Initial Customer shall transfer ownership of all item(s) to CyberPower without warranty by the Initial Customer, but free of lien or other interest.

CONDITIONS COMMON TO THE LIMITED WARRANTY AND THE CONNECTED EQUIPMENT GUARANTEE

The Limited Warranty and the Connected Equipment Guarantee are the only and the exclusive express warranty of CyberPower with respect to the Product. This exclusion of other express warranties applies to written and oral express warranties.

LIMITATION: THE LIMITED WARRANTY AND THE CONNECTED EQUIPMENT GUARANTEE DOES NOT COVER

The Limited Warranty and the Connected Equipment Guarantee are intended to exclusive rights and remedies and replace any other rights, to the extent allowed by law.

1. As to the CyberPower Product, the limited warranty **does not** cover or apply to: misuse, modification, operation or storage outside environmental limits for the Products, in transit, in shipment, or in storage, damage or deterioration, improper operation or maintenance, or use with items or equipment not designed or intended for use with the product.
2. As to Connected Equipment, the Connected Equipment Guarantee covers only damage within the specific terms of the Connected Equipment Guarantee to Connected Equipment (and only up to the applicable aggregate ceiling amount).
3. The Connected Equipment Guarantee does not cover damage to Connected Equipment or apply if the Product has been operated in a failure mode or not in compliance with CyberPower operating instructions and manuals, or if the Connected Equipment has been operated in a failure mode or not in compliance with the instructions and manuals of its manufacturer/vendor.

The Limited Warranty and the Connected Equipment Guarantee Do Not Apply Unless The Initial Customer:

1. Has properly connected the Product and the Connected Equipment to properly wired and grounded outlets (including compliance with electrical and safety codes of the most current electrical code (ANS/NFPA 70), without the use of any adapters, extension cords or other connectors.
2. Has provided a suitable and proper environment for use and installation of the Product and Connected Equipment.
3. Has properly installed and operated the CyberPower Product and Connected equipment.
4. Has operated the Product at all times within the limitations on the Product's VA capacity as stated in this User Manual.

CyberPower Does Not Cover or Undertake Any Liability in Any Event for Any of the Following:

1. Loss of or damage to data, records, or software or the restoration of data or records, or the reinstallation of software.
2. Damage from causes other than AC Power Line Transients, spikes, or surges on properly installed, grounded and code-compliant 120 volt power lines in the United States and Canada; transients, surges or spikes on standard telephone land lines, PBX telephone equipment lines or Base 10T Ethernet lines, when properly installed and connected. (This exclusion applies, for example, to fluctuations in data transmission or reception, by CATV or RF transmission or fluctuations, or by transients in such transmission.
3. Damage from any circumstance described as excluded above with respect to the product.
4. Damages from fire, flood, wind, rain, rising water, leakage or breakage of plumbing, abuse, misuse or alteration of either the product or the Connected Equipment.

Exclusion of Consequential and Other Damages.

The sole and exclusive remedies of the Initial Customer are those provided by the Limited Warranty and Connected Equipment Guarantee. CyberPower excludes any liability for personal injury under the Limited Warranty and Connected Equipment Guarantee. CyberPower excludes any liability for direct, indirect, special, incidental or consequential damages, whether for damage to or loss of property [EXCEPT FOR (AND ONLY FOR) the specific limited agreement of CYBERPOWER to provide certain warranty benefits regarding "Connected Equipment" under the "CYBERPOWER Connected Equipment Guarantee"], loss of profits, business interruption, or loss of information or data. NOTE: Some States or Provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.

DO NOT USE FOR MEDICAL OR LIFE SUPPORT EQUIPMENT OR OTHER HIGH RISK ACTIVITIES.

CyberPower does not sell the Products for use in high-risk activities. The Product is not designed or intended for use in hazardous environments requiring fail-safe performance, including the operation of nuclear facilities, aircraft navigation or communication systems, air traffic control, weapons systems, life support or medical applications or for use in any circumstance in which the failure of the Product could lead directly to death, personal injury, or severe physical or property damage, or that would affect operation or safety of any medical or life support device (collectively, "High Risk Activities"). CyberPower expressly disclaims any express or implied warranty of fitness for High Risk Activities. CyberPower does not authorize use of any of its products use in any High Risk Activities.

ANY SUCH USE IS IMPROPER AND IS A MISUSE OF CYBERPOWER PRODUCTS.

The Limited Warranty and the Connected Equipment Guarantee are governed by the laws of the United States and the State of Minnesota, without reference to conflict of law principles. The application of the United Nations Convention of Contracts for the International Sale of Goods is expressly excluded.

Contact Information: CyberPower's address is 5555 12th Ave East, Suite 110, Shakopee, MN 55379 and its phone number is (952) 403-9500 or Toll-free: (877) 297-6937. CyberPower is the warrantor under this Limited Warranty. You may also contact CyberPower on the Internet at www.cyberpowersystems.com.